

## **Project Operating Plan – Paducah: Recovery Act Project**

### **Paducah: Recovery Act Project Project Operating Plan**

#### **BACKGROUND**

<b>Recovery Act Project:</b>	Paducah Gaseous Diffusion Plant – Uranium Enrichment Decontamination and Decommissioning (UE D&D) – Accelerate Cleanup of Surplus Facilities, Soil and Groundwater
<b>TAFS:</b>	89-09/10-5657 UE D&D EM - American Recovery and Reinvestment Act of 2009
<b>Project Identification Code:</b>	2002120
<b>Recovery Act Bill Reference:</b>	PL 111-5 – Title IV Energy and Water Development, Uranium Enrichment Decontamination and Decommissioning Fund
<b>Project Cost:</b>	\$80.4M
<b>Budget Authority:</b>	Standard Accounting and Reporting System Fund Code: 2002120; Control B&R:FF.01.11.00.0
<b>Program Office:</b>	Environmental Management (EM)
<b>Recovery Program Plan:</b>	EM – Uranium Enrichment Decontamination and Decommissioning Fund
<b>Management Office:</b>	Portsmouth/Paducah Project Office (PPPO), William Murphie, (859) 219-4001 william.murphie@lex.doe.gov

#### **LEADS**

<b>Implementation:</b>	Not Applicable
<b>Breakthrough:</b>	Not Applicable
<b>Laboratory:</b>	Not Applicable

### **I. SUMMARY & OBJECTIVES**

#### **Summary:**

The Energy Policy Act of 1992 assigned the Secretary of the Department of Energy (DOE) the responsibility to decontaminate and decommission the uranium enrichment gaseous diffusion plants (GDPs). This American Recovery and Reinvestment Act (Recovery Act) project accelerates the decontamination and decommissioning (D&D) of the facilities by as much as 22 fiscal years.

Investment in this project will accelerate the D&D of three facilities at the Paducah GDP, two large chemical processing facilities and one contaminated metals smelting facility. Specific accomplishments include:

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### **C-410 Complex**

- Accelerate and complete the dismantlement and disposal of all major systems and large process equipment contained within the C-410 Uranium Hexafluoride Production Complex; and have 25% of the total piping and equipment removed by 7/25/2010. The C-410 Complex includes C-410, C-410-C, C-410-I, C-411, and C-420 (five buildings).

### **C-340 Uranium Metal Production Complex**

- Accelerate and complete the dismantlement and disposal of all major systems<sup>1</sup> and large process equipment contained within the C-340 Uranium Metal Production Complex; complete all preparatory activities to leave the 340-A, C-340-B, and C-340-C buildings in a state of readiness for demolition, and complete structural demolition of the C-340-D and C-340-E buildings to slab (3,988 square feet). The C-340 Complex is made up of C-340-A, C-340-B, C-340-C, C-340-D, and C-340-E (five buildings)<sup>2</sup>.

### **C-746-A East End Smelter**

- Accelerate and complete the packaging and disposal of loose materials, dismantlement and disposal of all systems and smelter equipment contained within the C-746-A East End Smelter; and complete structural demolition of the entire Smelter facility to slab (19,200 square feet).

The Recovery Act project is projected to result in an acceleration of the life cycle schedule of approximately six months from FY 2012 to FY 2011 for the C-410 Complex, over five years from FY 2016 to FY 2011 for the C-340 Complex, and 22 years from FY 2033 to FY 2011 for the C-746-A East End Smelter.

The overall cost savings for Paducah is estimated to be approximately \$28M, which includes the cost savings on the Recovery Act new scope (D&D of C-746-A East End Smelter). The cost savings on the Recovery Act new scope is due to the escalation cost saved by accelerating the work by 22 fiscal years.

This Recovery Act work ties to the following DOE and EM Strategic Goals and Themes:

DOE Strategic Goal 4 –Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.

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<sup>1</sup> Major process systems in the C-340 Complex include the hydrofluoric acid system; magnesium fluoride system; uranium system; hydrogen system; and heating, ventilation and air conditioning (HVAC) system.

<sup>2</sup> The Facilities Information Management System (FIMS) for the Paducah GDP lists the five facilities for the C-340 Complex: C-340 (as a separate facility), C-340-A, C-340-B, C-340-C, and C-340-D. FIMS does not include C-340-E. C-340 is included in the C-340-A, C-340-B, and C-340-C (main facility) listing for Recovery Act work. C-340-E is an approximately 100 square foot building external to the C-340 main facility that housed the emergency propane generator.

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DOE Strategic Goal 5 – Management and Excellence – Enabling the Department’s mission through sound management and business practices.

EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

### **De-inventory and Demolition Projects:**

<b>Facility Identification Number</b>	<b>Facility Name</b>	<b>Square Footage<sup>3</sup></b>
<b>C-410-Exp, C-410, C-420</b>	<b>C-410 Feed Plant, C-411, C-420 Greensalt Plant</b>	<b>195,119</b>
<b>C-340-D</b>	<b>Magnesium Storage Building</b>	<b>3,888</b>
<b>C-340-E</b>	<b>Emergency Power for Critical Alarms</b>	<b>100</b>
<b>C-746-A</b>	<b>North Warehouse (East End Smelter)</b>	<b>19,200</b>

### **Work Scope Changes:**

The original ARRA completion milestone for the C-410 Complex D&D project was to complete building demolition to slab by 9/30/2011. To accomplish this work a 29-man labor crew was hired to accelerate the on-going base work scope. However, the majority of the work was still funded by the base program.

Shortly after the Deep Dive Presentation, Paducah modified its approach to align with HQ goals to minimize workforce impacts and also accelerate the Recovery Act spending. To accomplish the HQ goals, Paducah eliminated the standard 50-hour work week and changed to a standard 40-hour work week on March 29, 2010. Paducah also evaluated the cost savings and risk associated with the Recovery Act work scope and utilized the available funding to perform “Buy Back Work Scope”. This change in direction is not projected to have a major impact to the overall performance of the C-410 Complex project.

The ARRA completion milestone for C-410 work scope was then changed to 25% of the total piping and equipment removed by 7/25/2010 in order to meet the HQ goals as stated above. The non-ARRA completion date for the C-410 Complex down to slab will remain 9/30/2011.

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<sup>3</sup> All square footage demolished is above grade.

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### **Buy Back Work Scope:**

Based on the potential availability of funds from unused management reserve and contingency funds and from cost efficiencies in executing the planned projects, an additional candidate project has been identified should funding become available:

- C-410 Complex D&D project

**Public Benefits:** These facilities contain hazardous or radiological material. Accelerating the removal and proper disposal reduces the risk of release of this material to the environment. As a result, the on-site workers and the public are protected from potential exposure to the hazardous and radiological material. The long term cost of maintaining these facilities is eliminated through accelerating demolition. Also, local businesses, vendors, and material suppliers will benefit as a result of increased purchases required to support the Recovery Act project work scope.

**Recovery Act Project Impacts:** Paducah has funding budgeted in FY 2012 – FY 2017 that is currently planned for the D&D of the C-410 and C-340 complexes. Funding the D&D of the East End Smelter is budgeted in the out-years as part of the D&D of the entire Paducah GDP. Accelerating the D&D of these facilities will allow that funding to be used for acceleration of other cleanup activities such as groundwater, soils, surface water, and burial grounds. Accelerating the demolition of these facilities will also reduce the mortgage cost for the program. The total contaminated footprint reduction at the Paducah plant is approximately 5 acres as a result of completing this work.

## **II. COST & SCHEDULE**

### **Table 1: Budget Implementation Monthly Obligations (\$M)**

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with an obligations table.

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**Table 2: Budget Implementation Actual and Planned Monthly Expenditures**  
<sup>4</sup>(\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with a costs table.

**NOTES:**

- Funds will be obligated against either the existing contract or the follow-on contract as appropriate.
- Project schedule and obligations and expenditure forecasts are based on an allocation of funds and modification of the PRS contract on May 6, 2009. This resulted in an immediate work start.

Funds Returned and Offsetting Collections

Not Applicable

**Table 3: Funds Returned and Offsetting Collections (\$M)**

	<b>FY 09</b>	<b>FY 10</b>	<b>FY 11</b>	<b>FY 12</b>	<b>FY 13</b>	<b>FY 14</b>	<b>FY 15</b>
There are no returned funds or any offsetting collections	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Indirect Costs

In accordance with the indirect cost definition provided in the Project Operating Plan instructions dated March 4, 2009, indirect costs associated with site operations (e.g., Government Furnished Services and Items) will be covered using base program dollars.

Changes to Baseline Budget

**Table 4: Changes to Baseline Budgets (\$M)**

Not applicable

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<sup>4</sup> DOE-EM Headquarters increased the Paducah ARRA funding to include Nevada Test Site (NTS) funding in the amount of \$1.6M. The Paducah site will not be managing these funds as they will be transferred directly to NTS by DOE-EM Headquarters. These funds are not included in Table 2.

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### Milestones – All projects

<b>Milestone Date (ARRA Baseline Date)</b>	<b>Milestone Description</b>
05/06/2009	Issue change order to contractor to begin planning and development of contract proposals for the Paducah Recovery Act Project
05/06/2009	Begin refining baseline estimates and schedules
05/06/2009	Begin draft Statement of Work and Basis of Estimate for the Paducah Recovery Act Project (through September 2011)
06/05/2009	Hire Subcontractor to develop specific training modules for integrated safety management system
06/05/2009	Submit 90 Day Proposal to DOE Contracting Officer (CO)

### Milestones: C-410 Complex

<b>Milestone Date (ARRA Baseline Date)</b>	<b>Milestone Description</b>
04/29/2010	Complete packaging from Zone 52 Vacuum System Stabilization
05/05/2010	Complete Vacuum System Stabilization in Zone 51
6/8/2010	Start Uranium Powder System Stabilization in Zone 1
6/30/2010	20% of total piping and equipment removed (80% Project Completion)
7/15/2010	Complete vacuum system removal & stabilization Zone 33
7/25/2010	25% of piping and equipment removed (100% Project Completion)

### Milestones: Buy-Back Work Scope - C-410 Complex

<b>Milestone Date (ARRA Baseline Date)</b>	<b>Milestone Description</b>
08/05/2010	Complete vacuum system stabilization in Zone 15
09/13/2010	Start Uranium Powder system stabilization in Zone 5
10/04/2010	Complete sampling campaign #7 packaging and disposal
11/04/2010	Complete sampling Paper Insulated Lead Cased cable in Sector 4
12/20/2010	Start HVAC fixative application in Zone 55
01/12/2011	Complete removal Paper Insulated Lead Cased cable in Sector 3
02/28/2011	25% of zones will be ready for demolition (80% Project Complete)
03/08/2011	Complete Activity Hazards Analysis for Ammonia System removal work planning

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<b>Milestone Date (ARRA Baseline Date)</b>	<b>Milestone Description</b>
04/11/2011	Complete alcohol system stabilization
05/02/2011	Complete disposal of Ammonia System waste
07/15/2011	Complete 75% of the sampling campaign for prohibited items.
08/18/2011	Complete prohibited items sampling campaign
09/30/2011	50% of zones will be ready for demolition (100% Project Complete)

### Milestones: C-340 Complex

<b>Milestone Date (ARRA Baseline Date)</b>	<b>Milestone Description</b>
05/22/09	C-340 Complex: Submit Security Plan to PPPO for review and approval
05/29/09	C-340 Complex: Identify long lead equipment & begin specification/bid package development
05/29/09	C-340 Complex: Begin work package development
07/13/09	C-340 Complex: Start development of National Environmental Policy Act Categorical Exclusion (NEPA CX) for systems and internal equipment removal and structure demolition (C-746-A East End Smelter only)
07/24/09	C-340 Complex: Complete development of NEPA CX for systems and internal equipment removal and structure demolition and submit to PPPO for approval
07/31/09	Submit C-340 Complex: Demolition Engineering Evaluation/Cost Analysis (EE/CA) to Regulatory Agencies
08/10/09	C-340 Complex: Initiate bid and internal award on long lead equipment
08/25/09	C-340 Complex: PPPO approve NEPA CX for systems and internal equipment removal
12/14/09	C-340 Complex: Start Accessible Asbestos Abatement Removal

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<b>Milestone Date (ARRA Baseline Date)</b>	<b>Milestone Description</b>
03/15/10	C-340 Complex: Start C-340-A Seventh Floor Piping Asbestos Removal
04/01/10	C-340 Complex: Submit C-340 Complex Demolition Action Memorandum to Regulatory Agencies
04/07/10	C-340 Complex: Start C-340-A Fifth Floor Piping Asbestos Removal
05/06/10	C-340 Complex: Start C-340-A Fourth Floor Piping Asbestos Removal
06/01/10	C-340 Complex: Start C-340 Complex Building Demolition at C-340-D and C-340-E
06/03/10	C-340 Complex: Start C-340-A Ground Floor Piping Asbestos Removal
07/21/10	C-340 Complex: Start C-340-A Second Floor Piping Asbestos Removal
07/26/10	Complete demolition of C-340-D and C-340-E
07/30/10	C-340 Complex: Submit C-340 Complex Demolition Removal Action Work Plan to Regulatory Agencies
08/17/10	C-340 Complex: Start C-340-C Second Floor Asbestos Abatement Start
09/27/10	C-340 Complex: Complete Accessible Asbestos Abatement Removal
10/18/10	C-340 Complex: 75 Percent Complete C-340-A Fifth Floor Systems Equipment Removal
11/29/10	C-340 Complex: 3rd Floor (C-340-C) System Equipment Removal Start
12/17/10	C-340 Complex: 50 Percent Complete C-340-A Fourth Floor Systems Equipment Removal



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Milestone Date (ARRA Baseline Date)	Milestone Description
01/20/11	C-340 Complex: 3rd Floor (C-340-A) System Equipment Removal Start
02/08/11	C-340 Complex: Complete systems equipment removal at C-340-C 3 <sup>rd</sup> floor (80% Project Complete)
02/09/11	C-340 Complex: 2nd Floor (C-340-C) System Equipment Removal Start
03/24/11	C-340 Complex: 2nd Floor (C-340-A) System Equipment Removal Start
04/27/11	C-340 Complex: Ground Floor (C-340-B) RCRA Sampling Start
05/06/11	C-340 Complex: Complete Uranium System Removal
05/12/11	C-340 Complex: Complete Magnesium Fluoride system removal
06/17/11	C-340 Complex: Complete HVAC system removal
06/27/11	C-340 Complex: Complete process piping and auxiliary system removal
07/29/11	C-340 Complex: 85 Percent Complete Transportation & Disposal of Waste
08/26/11	C-340 Complex: 92 Percent Complete Transportation & Disposal of Waste
09/30/11	C-340 Complex: Complete all preparatory activities to leave the C-340 Complex (C-340-A, -B, and -C process facilities) in a state of readiness for demolition.
09/30/11	C-340 Complex: Complete the dismantlement and disposal of all major systems and large process equipment

### Milestones: C-746-A

Milestone Date (ARRA Baseline Date)	Milestone Description
06/08/09	C-746-A East End Smelter: Begin work package development

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06/19/09	C-746-A East End Smelter: Start development of National Environmental Policy Act Categorical Exclusion (NEPA CX) for systems and internal equipment removal and structure demolition (C-746-A East End Smelter only)
06/30/09	C-746-A East End Smelter: Complete development of NEPA CX for systems and internal equipment removal and structure demolition and submit to PPPO for approval
07/06/09	Submit regulatory notification of work in a Solid Waste Management Unit (SWMU) to Kentucky Division of Waste Management for C-746-A East End Smelter
07/13/09	C-746-A East End Smelter: PPPO approve NEPA CX for systems and internal equipment removal
10/12/09	C-746-A East End Smelter: Oak Ridge approval of Vulnerability Assessment
01/29/10	C-746-A East End Smelter: Vacuum and Lockdown Interior - Field Start
02/26/10	C-746-A East End Smelter: Complete Installation of Trailer Park
03/10/10	C-746-A: East End Smelter: Start Process Piping Removal
04/01/10	C-746-A East End Smelter: Start Loose Material Removal
05/06/10	C-746-A East End Smelter: Complete loose materials removal.
05/17/10	C-746-A East End Smelter: Complete Accessible Asbestos Abatement Removal
06/17/10	C-746-A East End Smelter: Identify long lead equipment & begin specification/bid package development
06/25/10	C-746-A East End Smelter: Remove & Package Fire Protection Piping
07/19/10	C-746-A East End Smelter: Complete Process Piping Removal
07/17/09	C-746-A East End Smelter: Initiate bid and internal award on long lead equipment
08/17/10	C-746-A East End Smelter: Start Removal of Hoppers
09/08/10	C-746-A East End Smelter: Start HVAC Removal
10/19/10	C-746-A East End Smelter: Remove & Package Conveyor Hopper/Overhead Crane
11/10/10	C-746-A East End Smelter: Complete Auxiliary Equipment Removal
12/17/10	C-746-A East End Smelter: 90 Percent Complete Process Misc Equipment for Disposal/Shipment
01/21/11	C-746-A East End Smelter: 10 Percent Complete Smelter Equipment Shipment/Disposal (80% Project Complete)
02/25/11	C-746-A East End Smelter: 25 Percent Complete Smelter Equipment Shipment/Disposal
03/25/11	C-746-A East End Smelter: 40 Percent Complete Smelter Equipment Shipment/Disposal
04/22/11	C-746-A East End Smelter: 55 Percent Complete Smelter Equipment Shipment/Disposal

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05/27/11	C-746-A East End Smelter: 70 Percent Complete Smelter Equipment Shipment/Disposal
06/01/11	C-746-A East End Smelter: Complete Removal of Smelter Equipment
06/02/11	C-746-A East End Smelter: Start Building Demolition
07/18/11	C-746-A East End Smelter: Complete Smelter Equipment Shipment/Disposal
08/31/11	C-746-A East End Smelter: Remove Structure Framing Complete
09/30/11	C-746-A East End Smelter: Complete building demolition to slab

### NEPA Compliance

The Portsmouth/Paducah Project Office approved the NEPA CX for C-746-A East End Smelter and C-340 Complex on July 1, 2009. The PPPO NEPA Compliance Officer will monitor implementation and, as necessary, determine whether additional NEPA review is required.

In executing this Recovery Act Project, PPPO will implement the project management requirements of DOE O 413.3A, *Program and Project Management for the Acquisition of Capital Assets*. PPPO will use the flexibility afforded by DOE O 413.3A and tailor its requirements to this project. This tailored approach does not mean deviation and will maintain the utility and value of clear project definition, configuration management and change control, and sound project controls, including earned value management.

PPPO intends to use existing EM site systems and practices to effectively monitor and report on the Recovery Act Project activities, including:

- Fully implement all Recovery Act transparency and reporting requirements through modifications to the contract that will fund this Recovery Act Project.
- Continue using approved programs and procedures currently in place with OR contractors and their subs, applying project management principles to Recovery Act Project execution, including reviewing and validating EM project cost and schedule baselines consistent with DOE Order 413.3 and identifying project risks and strategies for managing them.
- Continue use of industry standard Earned Value Management System (EVMS) to compare actual project scope, cost, and schedule performance against planned performance as depicted in the baseline.

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- Continue monitoring of the contractors' EVMS reports to ensure the Recovery Act Project is on track and, if not or if trends are in a negative direction, to develop and implement corrective actions.
- Hold monthly management reviews to provide updates on the Recovery Act Project to EM's senior-most executives.
- Secure support service contractors to provide limited augmentation of federal procurement, budget and finance, project controls, and technical oversight capabilities for the Recovery Act Project.
- Assign appropriately qualified staff to the Recovery Act Project to provide technical and programmatic oversight of the contractors performing the work and be the day-to-day governmental interface and manager for the project.
- Use an Integrated Project Team of Federal and contractor staff with project knowledge and subject matter expertise essential to the successful planning and execution of the project – including safety, risk management, engineering, quality assurance, contracts administration, and project controls.
- Develop detailed risk management plans for the Recovery Act Project to identify and mitigate risks, and assign roles and responsibilities for managing the risks.

**Table 5: Delivery Schedule for Capital Asset Projects**

<b>Program/Office of Engineering and Construction Management Milestone</b>	<b>Delivery (End) Date</b>	<b>Comments</b>
Develop Parametric Performance Baseline (Individual Projects)	November 2006	Initial baseline was submitted for DOE and External Independent Review (EIR).
If < \$100 M Perform Independent Project Review (IPR), > \$100 M Perform EIR (Individual Projects)	February 2007	Onsite review started in February 2007 with recommendation for certification of the near-term performance baselines and verification of the reasonableness of the out-year planning estimate range (OPER) by the Office of Engineering and Construction Management in November 2007. The D&D of the C-410 Complex is included in the certified

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		baseline and the D&D of the C-340 Complex was included in the verified OPER. The D&D of the C-746-A East End Smelter will be accelerated from the out-years into the near-term performance baseline by a Baseline Change Proposal.
Approve Performance Baseline	January 2008	Baseline Change Proposal for Recovery Act Project was approved December 9, 2009
Approve Start of Construction	January 2008	Critical Decision (CD)-2/3 approval for the C-410 Complex is addressed by the existing CD-2/3 approval for the Paducah Operations Project issued January 11, 2008. An onsite Independent Project Review and Recovery Act Readiness Evaluation were conducted during the weeks of August 3, 2009 and August 17, 2009, respectively. The final draft report recommends approval to proceed. CD-2/3 approvals for the C-340 Complex and the C-746-A East End Smelter were issued on September 30, 2009.
Develop capital asset projects Integrated Project List	October 2009	Capital projects were identified as a result of the Paducah Independent Project Review
Approve Project Completion	September 2011	Projected completion date is for Recovery Act subprojects only.

**REMINDER:** *Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.*

**NOTES:** There is a slight risk that the regulatory agencies could delay approval of the Removal Action Work Plan for demolishing the structure of the C-410 buildings. The Paducah Federal Project Director (FPD) and Deputy FPD have met with all regulatory agencies and recommended real time reviews and comment resolution sessions to expedite document approval. Paducah has a high degree of confidence that our approach will result in achieving the document approval on schedule, which will result in completing demolition on schedule. If the regulatory agencies delay their approval then a day for day delay will result. There is a slight risk that extensive security measures will be required during the disposal of material and demolition of the East End Smelter resulting in increased cost and schedule

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delays. Significant coordination and planning is ongoing between contractors and the Department to mitigate this risk. The C-410 facility is located adjacent to operating facilities leased to the United States Enrichment Corporation (USEC). There is a risk that the demolition of the C-410 facility could be impacted by adjacent USEC operations. Waste may be generated that requires long lead time generation to resolve profile and specific regulatory issues to allow disposal. Additional risks are detailed in the Vulnerabilities Assessment and Risk Mitigation Plan (submitted to Headquarters April 13, 2009), the Risk Management Self Assessment (submitted to Headquarters June 29, 2009), and the revised Risk Ratings Matrix (submitted to Headquarters December 7, 2009). Paducah will not have any ARRA Management Reserve or Fund Contingency available with the utilization of the \$14.8M cost savings to fund the Buy Back work scope.

### **III. PERFORMANCE**

#### **Performance Measures**

**Table 6a: Project Performance Targets**

Recovery Act Project Identification Code	2002120
Linkage To S-1 Priorities	Nuclear Security and Legacy – (a total of approximately 218,307 square feet will be demolished; this is approximately 5 <sup>5</sup> acres of site contaminated footprint reduction)
Linkage to Current Program Goal (if applicable)	EM Goals – Environmental responsibility to protect the environment; to safely disposition large volumes of nuclear waste; and deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission.
Three Year Outcome-Oriented Performance Measure (end of FY 2011)	1) The ARRA Completion milestone is 25% of the total piping and equipment removed from the C-410 Complex. The milestone for the non-ARRA portion of work is to complete structural demolition of the entire C-410 Complex to slab (195,119 square feet). 2) Complete all preparatory activities to leave the C-340-A, C-340-B, and C-340-C buildings in a state of readiness for demolition, and complete structural

<sup>5</sup> The acreage is calculated based on FIMS data, which includes the entire square footage (all floors) of the combined buildings being demolished.

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	demolition of the C-340-D and C-340-E buildings to slab (3,888 square feet) 3) Complete structural demolition of the entire C-746-A East End Smelter facility to slab (19,200 square feet)
First Year Performance Target (FY 2009 3 <sup>rd</sup> and 4 <sup>th</sup> Quarters only)	C-340 Complex and C-746-A East End Smelter: NEPA CX Approval
Quarter 3 (Q3) – Project-Level Quarterly Performance Milestone(s)	1) C-410 Field Start (begin systems removal) 06/2009 2) C-746-A East End Smelter: Complete development of NEPA CX for systems and internal equipment removal and structure demolition and submit to PPPO for approval 6/2009
Q4 – Project-Level Quarterly Performance Milestone(s)	1) C-340 Complex and C-746-A East End Smelter: NEPA CX approval 8/2009 2) Submit C-340 Demolition Engineering Evaluation/Cost Analysis (EE/CA) to Regulatory Agencies. 7/2009
Second Year Performance Target (accomplishments in FY 2010)	1) C-746-A East End Smelter: Complete Loose Material Removal 2) Complete C-340 Complex Building Demolition at C-340-D and C-340-E
Q1 - Project-Level Quarterly Performance Milestone(s)	1) C-340 Complex: Start Accessible Asbestos Abatement Removal 12/2009
Q2 - Project-Level Quarterly Performance Milestone(s)	1) C-340 Complex: Start C-340-A Seventh Floor Piping Asbestos Removal 03/2010 2) C-746-A East End Smelter: Start Process Piping Removal 3/2010
Q3 - Project-Level Quarterly Performance Milestone(s)	1) C-340 Complex: Start C-340-A Fourth Floor Piping Asbestos Removal 05/2010 2) C-746-A East End Smelter: Complete Loose Materials Removal 05/2010 3) Submit C-340 Complex Action Memorandum to Regulatory Agencies 04/2010 4) C-410 Complex: Complete vacuum stabilization in Zone 51 05/2010
Q4 - Project-Level Quarterly Performance Milestone(s)	1) C-340 Complex: Start C-340-C Second Floor Asbestos Abatement 08/2010 2) C-746-A East End Smelter: Start Removal of Hoppers 08/2010 3) Complete C-340 Complex Building Demolition at C-340-D and C-340-E 07/2010 4) C-410 Complex: Complete vacuum

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	removal and stabilization Zone 33 07/2010 5) C-410 Complex: Complete vacuum stabilization in Zone 15 8/2010
Third Year Performance Target (Accomplishments in FY 2011)	1) Complete C-746-A East End Smelter Building Demolition 2) 50% of Zones in C-410 Complex are ready for demolition 3) Complete all preparatory activities to leave the C-340 Complex (C-340-A, C-340-B, and C-340-C process facilities) in a state of readiness for demolition
Q1 - Project-Level Quarterly Performance Milestone(s)	1) C-746-A East End Smelter: Complete Auxiliary Equipment Removal 11/2010 2) C-410 Complex: Start HVAC fixative application in Zone 55 12/2010
Q2 - Project-Level Quarterly Performance Milestone(s)	1) C-340 Complex: Complete systems equipment removal at C-340-C 3 <sup>rd</sup> floor 2/2011 2) C-410 Complex: 25% of Zones will be ready for demolition 2/2011
Q3 - Project-Level Quarterly Performance Milestone(s)	1) C-340 Complex: Complete Magnesium Fluoride System Removal 05/2011 2) C-340 Complex: Complete Uranium System Removal 05/2011 3) C-746-A East End Smelter: Complete removal of smelter equipment 06/2011 4) C-340 Complex: Complete HVAC System Removal 06/2011 5) C-410 Complex: Complete alcohol system stabilization 4/2011 6) C-410 Complex: Complete disposal of Ammonia system waste 5/2011
Q4 - Project-Level Quarterly Performance Milestone(s)	1) C-410 Complex: Complete 50% of zones ready for demolition 09/2011 2) C-746-A East End Smelter: Complete building demolition to slab 09/2011 3) C-340 Complex: Complete all preparatory activities to leave the C-340 Complex (C-340-A, C-340-B, and C-340-C process facilities) in a state of readiness for demolition 09/2011 4) C-340 Complex: Complete the dismantlement and disposal of all major systems and large process equipment 09/2011



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**Table 6b. C-410 Detailed ARRA-Specific Project Performance Measures and Targets**

C-410												
	FY 2009 Q3 Target	FY 2009 Q4 Target	FY 2010 Q1 Target	FY 2010 Q2 Target	FY 2010 Q3 Target	FY 2010 Q4 Target	FY 2011 Q1 Target	FY 2011 Q2 Target	FY 2011 Q3 Target	FY 2011 Q4 Target <sup>1</sup>	FY 2012 Yearl yTarg et	Total ARRA Target
Square foot <sup>2</sup> demolished										195,119		195,119
Nuclear Facility Completion										1		1
Remediation Complete (SWMUs)										5		5
Site Remediated / Footprint reduction (Acres)										4.7		4.7

- 1- All performance measures will be realized using base program funds. The Completion Milestone for the ARRA work scope is 50% of zones ready for demolition.  
 2- All square footage demolished is above grade.

**Table 6c. C-340 Detailed ARRA-Specific Project Performance Measures and Targets**

C-340												
	FY 2009 Q3 Target	FY 2009 Q4 Target	FY 2010 Q1 Target	FY 2010 Q2 Target	FY 2010 Q3 Target	FY 2010 Q4 Target	FY 2011 Q1 Target	FY 2011 Q2 Target	FY 2011 Q3 Target	FY 2011 Q4 Target	FY 2012 Yearly Target	Total ARRA Target
Square foot <sup>1</sup> demolished						3,988						3,988
Remediation Complete (SWMUs)										9		9
Site Remediated / Footprint reduction (Acres)										.1		.1
Facility Square footage demolition ready										66,000		66,000
D&D debris disposed (cubic meters)						580	680	780	780	973		3793

- 1 - All square footage demolished is above grade.

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**Table 6d. C-746-A East End Smelter Detailed ARRA-Specific Project Performance Measures and Targets**

C-410												
	FY 2009 Q3 Target	FY 2009 Q4 Target	FY 2010 Q1 Target	FY 2010 Q2 Target	FY 2010 Q3 Target	FY 2010 Q4 Target	FY 2011 Q1 Target	FY 2011 Q2 Target	FY 2011 Q3 Target	FY 2011 Q4 Target	FY 2012 Yearly Target	Total ARRA Target
Square foot <sup>1</sup> demolished										19,200		19,200
Radioactive Facility Completion										1		1
D&D debris disposed (cubic meters)										1392.5		1392.5
Site Remediated / Footprint reduction (Acres)										0.4		0.4

1 - All square footage demolished is above grade.

### National Strategic Benefits

Not Applicable

**Table 7: National Strategic Benefits**

1. Not Applicable

## IV. MANAGEMENT

### Secretarial-level Items

**Table 8: Secretary's Priorities**

Secretary's Priorities	Project (Qualitative) Impacts	Project (Quantitative) Impacts
Science and Discovery		
Clean, Secure Energy		
Economic Prosperity	Positive economical impact resulting from purchasing supplies and materials from local businesses and vendors.	
National Security and Legacy	Accelerating the removal and proper disposal of hazardous or radiological	Demolition of 8 buildings to slab. Contaminated footprint reduction of

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	material reduces risk of releases of this material to the environment.	approximately 5 acres.
Climate Change		

### Collaboration and Coordination

- The demolition of these buildings involves the Commonwealth of Kentucky and the U.S. Environmental Protection Agency (EPA) as regulating agencies for the PGDP. The Department is coordinating with the Commonwealth of Kentucky and Region 4 of the EPA on a daily basis to ensure that the Recovery Act projects are completed in compliance with laws, regulations, and cleanup agreements.
- The contractors and the Department have initiated discussions with USEC regarding the demolition of the Recovery Act projects on the Paducah Site (DOE leases the production facilities at the PGDP to USEC), and other on-site Recovery Act activities which must be coordinated between the two entities.
- Certain wastes generated at the C-746-A East End Smelter will require disposition at the Nevada Test Site (NTS). Both contractor and DOE personnel from Paducah will work closely with NTS personnel to ensure waste disposal activities can be accomplished on a schedule that supports timely completion of activities under the Recovery Act.

### Federal Infrastructure Investments

These facilities contain hazardous and/or radiological material. Accelerating the removal and proper disposal reduces risk of releases of this material to the environment.

### Line Management

The contractor will use existing practices/procedures to maintain accountability and transparency with respect to Recovery Act activities. These practices include cost tracking through a defense contract audit agency audited accounting and procurement system and a DOE audited project management reporting system. As a part of this reporting system, the contractor will continue to have monthly internal project reviews and continue to conduct a monthly project review with the integrated project team. The Recovery Act projects will be tracked and reported independently. The contractor will use the existing work management program and integrated safety management system to plan and execute the Recovery Act projects. The contractor will have a dedicated project lead, accountant and document tracking specialist for documentation purposes for the Recovery Act projects. In addition, the contractor and DOE will have weekly update meetings to discuss progress and any potential impediments.

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### Needs from Staff Offices

#### 1) Human Capital

**NOTE:** Based on the guidance received from DOE Planning Analysis and Evaluation (Jeremy Mark) in an e-mail from DOE EM-Recovery (Rodney Cummings) on March 26, 2009, at 1752 hours, only positions that require support from the HQ office of Human Capital should be identified in Table 9.

**Table 9: Information on Hiring Under the Recovery Act**

# & Type of Positions (Title, Series and Grade)	Location (Headquarters or Field – w/location)	Federal or Contractor	Timeframe (1-6mos; 6+mos; other; specify date needed if possible)

#### 2) Procurement

**Table 10: Procurement Plans**

Activity	Type	New/Exist (N/E)	Changes (E), Needs (N)	Status	Expected Complete	Issues (Y/N)
Issue Change Order (90 day planning)	Contract	Exist		Complete	5/06/2009	N
Issue Request for Proposal and supplemental agreement extending contract to 6/2010	Contract	Exist		Complete	7/29/2009	N
Sign modification, includes definitization of change order (90 day planning)	Contract	Exist		Complete	9/14/2009	N
Sign modification, includes definitization of the supplemental agreement	Contract	Exist		To be completed after receipt and review of proposal	5/21/2010	N

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(contract extension)						
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**REMINDER:** *Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.*